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Applicant : LÖSCH
Serial No : 10/522,931
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Examiner : AMIRI, NAHID
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Hon. Commissioner of Patents
and Trademarks
Washington, D.C. 20231

APPEAL BRIEF

(1) REAL PARTY IN INTEREST.

The real party in interest is Nothelfer GMBH.

(2) RELATED APPEALS AND INTERFERENCES.

There are believed to be no related appeals or interferences.

(3) STATUS OF CLAIMS.

Claims 1-19 are on appeal.

Claims 1, 2, 4-9 and 19 stand rejected under 35 U.S.C. 102(e) as being anticipated by Haddock (US 7,100,338).

Claims 3 and 10-18 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Haddock.

(4) STATUS OF AMENDMENTS.

The amendment after final rejection filed March 6, 2007 was entered for purposes of appeal.

(5) SUMMARY OF THE CLAIMED SUBJECT MATTER

CLAIM 1:

Claim 1 is directed to a connection of edges of formed sheets 1, 2 (page 2, line 13; page 6, lines 11-12). The edges of the sheets are in partial planar contact (Figures 3, 4, 5; page 2, line 15) and can be detachably connected with each other (page 2, line 15-16). The connection comprises a first sheet 1 (page 6, line 11) with an edge (Figure 1 and Figure 2; page 2, line 16) comprising a plurality of mounts 3 (page 6, line 11) arranged thereon (Figure 1; page 6, lines 10-11). The connection of edges further comprises a second sheet 2 (page 6, lines 11-12) with an edge (Figure 3 and Figure 4; page 2, line 16). The second sheet 2 comprises a plurality of mounting flanges 4 (page 6, lines 11-12). The first and second sheets 1, 2 are positioned such that each mounting flange 4 is in flat contact with each mount 3 (Figure 3 and 4). A clamping strip 8 (page 2, lines 16-19; page 6, line 15 to page 7, line 1) provides a detachable connection (page 2, lines 16-19) of the sheets 1, 2 at the mounts 3 and mounting flanges 4. A screw connection 5 (Figure 3, page 6, lines 11-13; page 6, line 16) is provided for connecting the

clamping strip 8 and the mounts 3 and mounting flanges 4 of the sheets 1, 2 (Figure 4; page 6, lines 11-13). This advantageously provides a connection that does not require a tacking unit to tack the two sheets together as used in conventional techniques. Tacking of the two sheets disadvantageously provides a permanent connection that requires damaging the outer sheet in order to detach the sheets, which ruins the outer appearance of the vehicle. The clamping strip 8 provides a detachable connection of the sheets at the mounts 3 and mounting flanges 4 so that the sheets can be disconnected after the vehicle is mocked up so that the outer sheet and inner sheet can be separately painted without damaging the outer appearance of vehicle, which is critical to body lines of the vehicle.

CLAIM 2:

The clamping strip 8 is specified in claim 2 as having at least partly a U-shaped design (Figure 4; page 3, line 7; page 6, line 15).

CLAIM 3:

The clamping strip 8 is specified in claim 3 as consisting of a plastic (page 3, lines 5-7; page 6, line 17; page 7, line 1).

CLAIM 4:

The clamping strip 8 is specified in claim 4 as having metal cores 15, 16 (Figure 6 and Figure 7; page 3, lines 14-15; page 7, lines 10-11).

CLAIM 5:

The clamping strips 8 and the edges of the sheets 1, 2 are specified in claim 5 as being connected to one another by means of the screw connection 5 or by means of a clipping device 19 (page 3, 17-19; page 8, lines 1-2).

CLAIM 6:

Claim 6 provides a joint sealing 12, 13 (Figure 4 and Figure 5; page 6, line 17; page 7, line 5) that is also connected together with the clamping strip 8 and the edges of the sheets 1, 2. The joint sealing 12, 13 is connected by means of screw connection 5 and/or the clipping device 19 (page 3, lines 17-19; page 7, lines 5-7).

CLAIM 7:

Claim 7 provides that a joint sealing 12, 13 (Figure 4 and Figure 5; page 6, line 17; page 7, line 5) is integrated in the clamping strip 8 (page 7, lines 5-6).

CLAIM 8:

The clamping strip 8 is specified in claim 8 as being designed as a cover strip (page 4, lines 6-7) and/or as an outer sealing (page 4, lines 6-7).

CLAIM 9:

The clamping strip 8 is specified in claim 9 as extending at least partially over the

circumference of edges of the sheets 1, 2 (page 3, lines 9-10).

CLAIM 10:

Claim 10 is directed to a formed sheet edge connection (Figure 3). The connection comprises a first sheet 1 (page 6, line 11) with an edge (Figure 1 and Figure 2; page 2, line 16) having an at least partially planar contact region flange 3 (Figures 3, 4, 5; page 2, line 15; page 6, line 11). A second sheet 2 (page 6, lines 11-12) with an edge (Figures 3, 4, 5; page 2, line 15) having an at least partially planar contact region flange 4 (Figures 3, 4, 5; page 2, line 15; page 6, lines 11-12). The first sheet flange 3 lies on top of the second sheet flange 4 (page 2, lines 16-17; page 9, line 5). The flanges 3, 4 are bent in the same direction (Figures 3-5; page 2, lines 17-18; page 9, lines 5-6). A clamping strip 8 (page 2, lines 16-19; page 6, line 15 to page 7, line 1) provides a detachable connection (page 2, lines 16-19) of the sheets 1, 2 at the flanges 3, 4. One of a screw connection 5 (Figure 3, page 6, lines 11-13; page 6, line 16) and a clipping device 19 (page 7, lines 5-7) connects the clamping strip 8 and the flanges 3, 4 of the sheets 1, 2 (page 3, lines 1-8). A sealing adhesive 6 (page 6, line 13) is inserted into the area of planar contact regions (page 6, lines 13-14).

CLAIM 11:

The clamping strip 8 is specified in claim 11 as having at least partly a U-shaped design (Figure 4; page 3, line 7; page 6, line 15).

CLAIM 12:

The clamping strip 8 is specified in claim 12 as consisting of a plastic (page 3, lines 5-7; page 6, line 17; page 7, line 1).

CLAIM 13:

The clamping strip 8 is specified in claim 13 as having a metal core 15, 16 (Figure 6 and Figure 7; page 3, lines 14-15; page 7, lines 10-11).

CLAIM 14:

The clamping strip 8 is specified in claim 14 as receiving an end of the clipping device 19 in a positive locking manner (Figure 8; page 8, lines 1-3). The clipping device 19 has an opposite end positively locked on a side of the flanges 3, 4 to clamp the flanges 3, 4 together with the clamping strip 8 (Figure 8; page 3, lines 17-19).

CLAIM 15:

Claim 15 provides a joint sealing 12, 13 (Figure 4 and Figure 5; page 6, line 17; page 7, line 5) connected together with the clamping strip 8 and the edges of the sheets 1, 2. The joint sealing 12, 13 is connected by means of the screw connection 5 or the clipping device 19 (page 3, lines 17-19; page 7, lines 5-7).

CLAIM 16:

Claim 16 provides that a joint sealing 12, 13 (Figure 4 and Figure 5; page 6, line 17; page 7, line 5) is integrated in the clamping strip 8 (page 7, lines 5-6).

CLAIM 17:

The clamping strip 8 is specified in claim 17 as being designed as cover strips (page 4, lines 6-7) and/or as a outer sealing (page 4, lines 6-7).

CLAIM 18:

The clamping strip 8 is specified in claim 18 as extending at least partially over the circumference of the edges of the sheets 1, 2 (page 3, lines 9-10).

CLAIM 19:

Claim 19 is directed to a formed sheet edge connection (Figure 3). The formed sheet edge connection comprises a first sheet 1 (page 6, line 11) with an edge (Figure 1 and Figure 2; page 2, line 16) comprising mounts 3 (page 6, line 11) arranged thereon (Figure 1; page 6, lines 10-11). The connection further comprises a second sheet 2 (page 6, lines 11-12) with an edge (Figure 1 and Figure 2; page 2, line 16). The second 2 sheet comprises flanges 4 page 6, lines 11-12). The first sheet 1 lies on top of the second sheet 2 (page 2, lines 16-17; page 9, line 5) such that the mounts 3 and flanges 4 are bent in the same direction (Figures 3-5; page 2, lines 17-18; page 9, lines 5-6). A clamping strip 8 (page 2, lines 16-19; page 6, line 15 to

page 7, line 1) provides a detachable connection (page 2, lines 16-19) of the sheets 1, 2 at the mounts 3 and flanges 4. A connection means 5, 19 (Figure 3 and Figure 8; page 6, lines 11-13; page 6, line 16; page 7, lines 5-7) is provided for connecting the clamping strip 8 and the mounts 3 and flanges 4 of the sheets 1, 2 (page 3, lines 1-8). A seal 6 (page 6, line 13) is inserted into the area of contact between the first sheet 1 and the second sheet 2 (Figures 3, 4, 5).

(6) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL.

Whether claims 1, 2, 4-9 and 19 are rejectable under 35 U.S.C. 102(e) as being anticipated by Haddock (US 7,100,338).

Whether claims 3 and 10-18 are rejectable under 35 U.S.C. 103(a) as being unpatentable over Haddock (US 7,100,338).

(7) ARGUMENT.

ISSUE: Whether claims 1, 2, 4-9 and 19 are rejectable under 35 U.S.C. 102(e) as being anticipated by Haddock (US 7,100,338).

The present invention relates to a formed sheet edge connection. This provides particular advantages relating to the outer appearance of a vehicle. The connection of edges in the present invention allows two sheets to be connected without the use of a tacking unit. This allows the outer door skin and the inner door to be connected and fitted to the motor vehicle to view the contour of the door skin with respect to the rest of the motor vehicle during

the mock up stage of the vehicle so it can be determined whether the sheet properly fits with the body style of the vehicle. The sheets can then be disconnected without damaging the outer door sheet so that the sheets can be disconnected and separately painted. It is critical to the overall appearance of the motor vehicle that the outer sheet is not damaged when disconnected from the inner sheet. The edge connection of the present invention also allows the outer sheet to be easily disconnected from the inner sheet so that the outer sheet can be easily repaired should the outer sheet get damaged during use of the vehicle. These advantages are provided based on an edge connection comprising a first sheet with an edge and a second sheet with an edge. The first sheet has mounts arranged thereon and the second sheet comprises flanges arranged thereon. The first sheet is mounted on top of the second sheet so that the mounts and flanges are bent in the same direction and so that the mounts are in flat contact with the flanges. A clamping strip detachably connects the sheets at the mounts and flanges. A screw connection connects the clamping strip and the mounts and mounting flanges of the first and second sheets. A seal is advantageously inserted into the area of contact between the first sheet and the second sheet. The seal advantageously prevents dirt and other impurities from entering the contact region of the two sheets.

In conventional techniques, the door outer sheet and the door inner sheet of a motor vehicle are connected together by spot welding to create a permanent connection. This provides the disadvantage in that the permanent connection can be detached only by destroying or damaging the door outer sheet. Applicant has discovered a solution to the problem of connecting the two sheets without having to create a permanent connection by spot welding the

two sheets together. The present invention provides a detachable connection of the edges of sheets in which tacking is no longer required, which advantageously allows the two sheets to be separated without damage to either of the two sheets. This advantageously allows for an easy connection of the outer sheet to the inner sheet once the outer sheet and inner sheet have been separately painted. The prior art as a whole fails to disclose such features or advantages.

Haddock discloses a clamp 360. The clamp 360 is mounted on a standing seam 354 of a panel assembly 350 that is defined by a plurality of interconnected panels 352. The standing seam 354 includes an extension 356 that is vertically disposed and a head 358 that is horizontally disposed on the distal portion of the standing seam 354. The clamp 360 includes a clamp body 362. The clamp body 362 includes a concave clamp body slot 364, a seam fastener hole 366 disposed on one side of the clamp body slot 364 and a seam fastener 368 for each seam fastener hole 366. The clamp body 362 also includes a seam recess 365 formed in the clamp body 362 on the opposite side of the clamp body slot 364 and a mounting cavity 370 on an exterior surface of the clamp body 362. The clamp 360 includes an insert 372 that is disposed within the clamp body slot 364 on the same side of the extension 356 of the standing seam 354 as the seam fastener 368. Part of the insert 372 is disposed below the head 358 of the standing seam 354 and part of the insert 372 is axially aligned with the seam fastener hole 366. The insert 372 is disposed within the clamp body slot 364 and is disposed below the head 358 of the standing seam 354. The insert 372 includes a seam fastener receptacle 374. Each seam fastener hole 366 in the clamp body 362 is aligned with a seam fastener receptacle 374 on the insert 372 to register the seam fastener 368 relative to the insert 372. When the clamp 360

is installed on the standing seam 354 each seam fastener 368 is directed through its corresponding seam fastener hole 366 so as to extend into the clamp body slot 364. Each seam fastener 368 sits within a fastener receptacle 374 on the insert 372 to force the insert 372 into engagement with the extension 356 of the standing seam 354. This forces the extension 356 of the standing seam 354 into engagement with an opposing and aligned portion of the clamp body 362 that defines the clamp body slot 364. A deformation of the extension 356 of the standing seam 354 in the direction of forces applied by the seam fastener 368 is provided by the protrusion 376 on the insert 372 pushing the extension 356 of the standing seam 354 into an aligned seam recess 365 on the clamp body 362. This places the insert 372 entirely in compression in the installed position on the standing seam 354.

Haddock fails to suggest and fails to teach a mount as featured in the claimed combination. At most Haddock merely discloses a two standing seams 354 having L-shaped portions that are in contact with one another. This is not a mount as claimed in the present invention.

Haddock fails to teach or suggest the combination of a plurality of mounts on one sheet that attach to a plurality of mounting flanges on another sheet. Haddock merely discloses a standing seam 354 of a panel assembly 350 that is defined by a plurality of interconnected panels 352. The plurality of interconnected panels 352 of Haddock do not have a plurality of mounts on one panel that is in flat contact with mounting flanges on another panel. In contrast to Haddock, the present invention takes a different approach. In the present invention, a first sheet has a plurality of mounts arranged thereon and a second sheet has a plurality of mounting

flanges arranged thereon. Each mounting flange of the present invention is in flat contact with each mount. In the present invention, a clamping strip detachably connects the first and second sheet at the mounts and the mounting flanges. This advantageously provides a detachable connection that does not damage the first and second sheets. Haddock fails to disclose a plurality of mounts on one extension that attach to a plurality of mounting flanges on another extension. The interconnected panel 352 of Haddock does not have an edge comprising a plurality of mounts arranged thereon.

As discussed above, claim 1 provides for features that define over Haddock. However, claim 1 does not provide the seal as featured in claim 19. The seal of the present invention advantageously prevents water from entering the area between the first sheet and the second sheet. This is significant in the present invention because it prevents corrosion and rusting of the outer sheets, which is of particular concern in a vehicle. Preventing water and other impurities from entering the area between the first sheet and the second sheet advantageously increases the service life of the vehicle.

Haddock fails to teach or suggest the combination of a seal inserted into an area of contact between a first sheet and a second sheet as featured in claim 19. A reference must provide some suggestion or teaching to direct the person of ordinary skill in the art toward the features of the present invention. Haddock clearly shows in Figure 9 that insert 372 is provided outside the interconnected panels 352. Haddock provides absolutely no suggestion or teaching of placing insert 372 between the contact areas of interconnected panels 352. In fact, Haddock takes a different approach than the present invention. In Haddock, each seam fastener 368 sits

within a fastener receptacle 374 on the insert 372 to force the insert 372 into engagement with the extension 356 of the standing seam 354. This disadvantageously creates a deformation (that is permanent) of the extension 356 of the standing seam 354 in the direction of forces applied by the seam fastener 368. The deformation of the extension 356 of the standing seam 354 disadvantageously creates a weaker connection between the interconnected panels 352. In contrast to Haddock the present invention provides a seal directly between the first sheet and the second sheet. This advantageously prevents impurities from entering the contact area located between the two sheets without weakening the strength of the two sheets by deformation as disclosed in Haddock. The insert 372 of Haddock is not applied in a contact area of the interconnected panels 352. Absent teachings and suggestions in the prior art to direct the person of ordinary skill in the art toward the combination claimed, the rejection should be considered untenable and the claims should be considered patentable as presented.

Accordingly, Appellant respectfully requests that the holding be reversed and that the rejection be removed.

ISSUE: Whether claims 3 and 10-18 are rejectable under 35 U.S.C. 103(a) as being unpatentable over Haddock (US 7,100,338).

As previously discussed above, Haddock fails to teach or suggest the combination of a first sheet with an edge comprising a plurality of mounts arranged thereon. At most, Haddock suggests extensions 356 of a standing seam 354 that are deformed via a seam fastener 368 and insert 372 so that the extensions 356 are in contact with one another. Further, Haddock does

not teach a second sheet having a plurality of planar contact region flanges arranged on top of a first sheet having a plurality of planar contact region flanges such that the flanges are bent in the same direction. The fact that the flanges are bent in the same direction is significant in the present invention for appearance purposes because the edges of the sheets cannot be visible from the outside when the sheets are attached to the motor vehicle body. A clamping strip is provided to advantageously secure the connection between the flanges. This advantageously allows for a detachable connection without having to use a tacking technique. In contrast, Haddock teaches a standing seam 354 having extensions 356 that are deformed to be in contact with one another. Haddock fails to provide contact region flanges on one extension to attach to contact region flanges on another extension such that the flanges are bent in the same direction. As clearly shown in Figure 9 of Haddock, the head 358 of the extension 356 is not bent in the same direction as the head of the other extension. Figure 9 of Haddock clearly shows that the head of one extension is bent around the head of another extension.

Further, Haddock fails to teach or suggest the combination of a sealing adhesive inserted into an area of the planar contact areas of the first and second sheet as featured in claim 10. A reference must provide some suggestion or teaching to direct the person of ordinary skill in the art toward the features of the present invention. As clearly seen in Fig. 9 of the Haddock disclosure, there is no sealing adhesive inserted in the area of the extensions 356. Haddock provides absolutely no suggestion or teaching of placing insert 372 between the contact areas of interconnected panels 352. The sealing adhesive of the present invention advantageously seals the area of the planar contact areas so that no dirt or any other impurity gets in between

the contact area of the two sheets. The Haddock reference fails to suggest such an advantage. Haddock provides a connection that pertains to sheet metals that are arranged on the outside facades of buildings. The present invention deals with connection of the edges of sheet metal for motor vehicles, which requires a highly precise and durable, waterproof connection of the sheet metals. The sealing adhesive is of crucial importance as it is important that no moisture enter between the outer sheet and the inner sheet to avoid corrosion and rusting. One of ordinary skill in the art would not be directed to provide sealing adhesive to the connection arrangement of Haddock since Haddock fails to be concerned with the problem of preventing moisture from entering the connection. Haddock fails to disclose inserting sealing adhesive in the contact area of the extensions 356. As such, the prior art as a whole fails to provide the features and advantages of the present invention.

Accordingly, Appellant respectfully requests that the holding be reversed and that the rejection be removed.

Respectfully submitted
for Appellant,

A handwritten signature in black ink, appearing to read 'J. McGlew', with a stylized flourish extending to the right.

By: _____
John James McGlew
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- and -



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JJM:BMD
71657-12

DATED: June 14, 2007
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SHOULD ANY OTHER FEE BE REQUIRED, THE PATENT AND TRADEMARK OFFICE
IS HEREBY REQUESTED TO CHARGE SUCH FEE TO OUR DEPOSIT ACCOUNT 13-
0410.

(8) CLAIMS APPENDIX

1. A connection of edges of formed sheets, wherein the edges of said sheets have at least partially planar contact and can be detachably connected with one another, the connection comprising:

a first sheet with an edge comprising a plurality of mounts arranged thereon;

5 a second sheet with an edge, said second sheet comprising a plurality of mounting flanges, said first and second sheets being positioned such that each mounting flange is in flat contact with each mount;

a clamping strip providing a detachable connection of said sheets at said mounts and mounting flanges; and

10 a screw connection for connecting said clamping strip and said mounts and mounting flanges of said sheets.

2. A connection in accordance with claim 1, wherein said clamping strip has at least partly a U-shaped design.

3. A connection in accordance with claim 1, wherein said clamping strip consists of a plastic.

4. A connection in accordance with claim 1, wherein said clamping strips have metal cores.

5. A connection in accordance with claim 1, wherein said clamping strips and edges of said sheets to be connected to one another are connected to one another by means of said screw connections or by means of a clipping device.

6. A connection in accordance with claim 5, wherein a joint sealing is also connected together with said clamping strip and said edges of said sheets to be connected by means of screw connections and/or a clipping device.

7. A connection in accordance with claim 1, wherein a joint sealing is integrated in said clamping strip.

8. A connection in accordance with claim 1, wherein said clamping is designed as a cover strip and/or as an outer sealing.

9. A connection in accordance with claim 1, wherein said clamping strip extends at least partially over the circumference of edges of said sheets.

10. A formed sheet edge connection, comprising:
a first sheet with an edge having an at least partially planar contact region flange;
a second sheet with an edge having an at least partially planar contact region flange, said first sheet flange lying on top of said second sheet flange with said flanges being bent in the

same direction;

a clamping strip providing a detachable connection of said sheets at said flanges;
one of a screw connection and a clipping device for connecting said clamping strip and
said flanges of said sheets; and
a sealing adhesive inserted into area of planar contact regions.

11. A connection in accordance with claim 10, wherein said clamping strip has at least partly a U-shaped design.

12. A connection in accordance with claim 10, wherein said clamping strip consists of a plastic.

13. A connection in accordance with claim 10, wherein said clamping strip has a metal core.

14. A connection in accordance with claim 10, wherein said clamping strip receives an end of clipping device in a positive locking manner and said clipping device has an opposite end positively locked on a side of said flanges to clamp said flanges together with said clamping strip.

15. A connection in accordance with claim 14, further comprising a joint sealing

connected together with said clamping strip and said edges of said sheets to be connected by means of said screw connection or said clipping device.

16. A connection in accordance with claim 10, wherein a joint sealing is integrated in said clamping strip.

17. A connection in accordance with claim 10, wherein said clamping strip is designed as cover strips and/or as a outer sealing.

18. A connection in accordance with claim 10, wherein said clamping strip extends at least partially over the circumference of said edges of said sheets.

19. A formed sheet edge connection, comprising:

a first sheet with an edge comprising mounts arranged thereon;

a second sheet with an edge, said second sheet comprising flanges, said first sheet lying on top of said second sheet such that said mounts and flanges are bent in the same direction;

5 a clamping strip providing a detachable connection of said sheets at said mounts and flanges;

a connection means for connecting said clamping strip and said mounts and flanges of said sheets; and

a seal inserted into area of contact between said first sheet and said second sheet.

(9) Evidence appendix

NONE

(10) Related proceedings appendix

NONE